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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/589,306	06/07/2000	Anthony Cyril Lowe	YO998-267X	8945		
7590 10/04/2005			EXAMINER			
Dr Daniel P Morris Esq			PARKER, F	PARKER, KENNETH		
IBM Corporatio	n perty Law Department	ART UNIT	PAPER NUMBER			
PO Box 218			2871			
Yorktown Heights, NY 10598			DATE MAILED: 10/04/2005			

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Applicati	on No.	Applicant(s)	<i>y</i>			
Office Action Summary		09/589,3	06	LOWE, ANTHON	Y CYRIL			
		Examine	,	Art Unit				
		Kenneth /	A. Parker	2871				
	- The MAILING DATE of this commun	ication appears on the	e cover sheet with the	correspondence ac	idress			
Period fo	• •	OD DEDLY IS SET T	O EVDIDE AMONTL	I/C) OR THIRTY (2	20) DAVE			
WHIC - Exter after - If NO - Failui Any r	ORTENED STATUTORY PERIOD F HEVER IS LONGER, FROM THE M Issions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this comn period for reply is specified above, the maximum st re to reply within the set or extended period for reply eply received by the Office later than three months and ad patent term adjustment. See 37 CFR 1.704(b).	IAILING DATE OF TH of 37 CFR 1.136(a). In no ev nunication. atutory period will apply and w will, by statute, cause the app	HIS COMMUNICATIC ent, however, may a reply be till expire SIX (6) MONTHS froi slication to become ABANDON	DN. imely filed in the mailing date of this c ED (35 U.S.C. § 133).				
Status								
1)	Responsive to communication(s) file	ed on <u>30 June 2005</u> .						
•—	•	2b)⊠ This action is r	ion-final.					
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims							
4)⊠ Claim(s) <u>17-20</u> is/are pending in the application.								
,	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)□	5) Claim(s) is/are allowed.							
6)⊠	☑ Claim(s) <u>17-20</u> is/are rejected.							
•	·- · · · · · · · · · · · · · · · · · ·							
8)	Claim(s) are subject to restric	ction and/or election r	equirement.					
Applicati	on Papers							
9) 🗌 .	The specification is objected to by th	e Examiner.						
10)	10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) 🗌	The oath or declaration is objected to	by the Examiner. N	ote the attached Offic	e Action or form P	ΓO-152.			
Priority u	nder 35 U.S.C. § 119							
•	Acknowledgment is made of a claim All b) Some * c) None of:	for foreign priority un	der 35 U.S.C. § 119(a)-(d) or (f).				
,-	1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No								
3. Copies of the certified copies of the priority documents have been received in this National Stage								
	application from the Internation	·						
* S	ee the attached detailed Office action	n for a list of the cert	ified copies not receiv	ved.				
Attachmen	t(s)							
	e of References Cited (PTO-892)		4) Interview Summar					
	e of Draftsperson's Patent Drawing Review (F nation Disclosure Statement(s) (PTO-1449 or		Paper No(s)/Mail I 5) Notice of Informal		O-152)			
	r No(s)/Mail Date		6) Other:					

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DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 17-20 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claims fail(s) to correspond in scope with that which applicant(s) regard as the invention can be found in the reply filed 6/30/05. In that paper, applicant has stated that the instant claims read on the invention of 08/542753, and this statement indicates that the invention is different from what is defined in the claim(s) because the means of the instant application claims are not shown in the parent application 08/542753, implying applicants claims are not what applicant intends to claim. In an attempt to argue in the reply of 6//30/05 that the written description requirement is met, applicant employs the same element, the liquid crystal layer, for both the liquid crystal layer and the reflecting means. This is clearly an unreasonable interpretation of language, first because the claim clearly recites two separate elements, and second because the liquid crystal layer is clearly not an equivalent means to the means of the instant specification, as the means of the specification are particular structured elements. If in fact applicant's reading of the claim were correct, which it is not, numerous other prior art references would become available as prior art, such as, for example, Fergason 4591233, which shows a liquid crystal layer and a single layer which has some degree of angle selectivity (See cover figure). Even further, any PDLC such as that of Fergason

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has some degree of angle selectivity, as off angle sees a longer path length though the liquid crystal layer and therefore an increased probability of scattering, so the clear would read on thousands of references such as the Fergason reference. Those references are not applied because the reading of the claim applied by applicant is not considered reasonable. Even futher, for the absorbing means, applicant again points to the same liquid crystal layer as for the other means above, which again is unreasonable and manifestly not equivalent means to an absorbing layer. So applicant uses the same layer for three claimed elements- a wholly unreasonable interpretation. Therefore, the current claims are not what applicant believes to be his invention, if appicant believes it to be that which is disclosed in 08/542/753.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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Claims 17 -19 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Cornelissen et al (in view of Fergason 4591233 as evidence that the claimed means are not equivalent to the means of parent application 08/542,753).

Claim 17-19 is written to, and Cornelissen et al discloses (cover figure) a liquid crystal display with an incident and opposite side (the equivalent to 14 and 9 of Neijzen), diffusing liquid crystal (the equivalent to 5 of Neijzen), a and reflecting means (the equivalent to 15 of Neijzen) between the first and second substrates which reflects light larger than a given angle and passes light below a given angle (see abstract), and an absorber (the equivalent to 10 of Neijzen) on the other side. Structured and multilayer embodiments are shown (illustrated in figs 4 and 6). Therefore, these claims 17-19 are anticipated by this reference. Applicant has amended the specification to make the current application a continuation in part of application # 08/542753. However, the written description requirement is clearly not met by that application in respect to claims 17-20, as the operation of the device of that application is completely different, and as the device lacks elements of the claims including the absorbing of light passed by the reflecting means. Here the effective filing date of the application does not go back to the continuation in part, as the written description is not met as there is not reflective means as claimed. In an attempt to argue in the reply of 6//30/05 that the written description requirement is met, applicant employs the same element, the liquid crystal layer, for both the liquid crystal layer and the reflecting means. This is clearly an unreasonable interpretation of language, first because the claim clearly recites two separate elements, and second because the liquid crystal layer is clearly not an equivalent means to the means of the instant specification, as the means of the specification are particular structured elements. If in fact applicant's reading of the claim were correct, which it is not, numerous other prior art references would become available as prior art, such as, for example, Fergason 4591233,

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which shows a liquid crystal layer and a single layer which has some degree of angle selectivity (See cover figure). Even further, any PDLC such as that of Fergason has some degree of angle selectivity, as off angle sees a longer path length though the liquid crystal layer and therefore an increased probability of scattering, so the clear would read on thousands of references such as the Fergason reference. Even futher, for the absorbing means, applicant again points to the same liquid crystal layer as for the other means above, which again is unreasonable and manifestly not equivalent means to an absorbing layer. So applicant uses the same layer for three claimed elements- a wholly unreasonable interpretation. Those references are not applied because the reading of the claim applied by applicant is not considered reasonable.

Claims 17 -20 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Neijzen, U.S. Patent # 5,929,956 (in view of Fergason 4591233 as evidence that the claimed means are not equivalent to the means of parent application 08/542,753)

Claim 17-19 is written to, and Neijzen et al discloses (fig 3a-3c) a liquid crystal display with an incident and opposite side 14 and 9, diffusing liquid crystal 5, a and reflecting means 15 between the first and second substrates which reflects light larger than a given angle and passes light below a given angle (see abstract), and an absorber 10 on the other side.

Structured and multilayer embodiments are shown (illustrated in figs 4 and 6). Therefore, these claims 17-19 are anticipated by this reference.

Applicant has amended the specification to make the current application a continuation in part of application # 08/542753. However, the written description requirement is clearly not met by that application in respect to claims 17-20, as the operation of the device of that application is completely different, and as the device lacks elements of the claims including the absorbing of

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light passed by the reflecting means. Here the effective filing date of the application does not go back to the continuation in part, as the written description is not met as there is not reflective means as claimed. In an attempt to argue in the reply of 6//30/05 that the written description requirement is met, applicant employs the same element, the liquid crystal layer, for both the liquid crystal layer and the reflecting means. This is clearly an unreasonable interpretation of language, first because the claim clearly recites two separate elements, and second because the liquid crystal layer is clearly not an equivalent means to the means of the instant specification, as the means of the specification are particular structured elements. If in fact applicant's reading of the claim were correct, which it is not, numerous other prior art references would become available as prior art, such as, for example, Fergason 4591233, which shows a liquid crystal layer and a single layer which has some degree of angle selectivity (See cover figure). Even further, any PDLC such as that of Fergason has some degree of angle selectivity, as off angle sees a longer path length though the liquid crystal layer and therefore an increased probability of scattering, so the clear would read on thousands of references such as the Fergason reference. Those references are not applied because the reading of the claim applied by applicant is not considered reasonable. Even further, for the absorbing means, applicant again points to the same liquid crystal layer as for the other means above, which again is unreasonable and manifestly not equivalent means to an absorbing layer. So applicant uses the same layer for threeclaimed elements- a wholly unreasonable interpretation.

Claim 20 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Neijzen, WO 98/23996 (in view of Fergason 4591233 as evidence that the claimed means are not equivalent to the means of parent application 08/542,753)

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Claim 20 written to, and Neijzen et al discloses (fig 3a-3c) a liquid crystal display with an incident and opposite side 14 and 9, diffusing liquid crystal 5, a and reflecting means 15 between the first and second substrates which reflects light larger than a given angle and passes light below a given angle (see abstract), and an absorber 10 on the other side. An angle dependent diffuser (illustrated in figs 4 and 6). Therefore, this claim is anticipated by this reference.

Please note that the diffuser has not been given the date of the parent application, as the angle dependent diffusing layer was not present in the parent case, and as no angle dependent diffusing was described as one of ordinary skill would not have determined that applicant was in possession of the combination with that feature. In fact, the parent application described the angle dependent reflector as having "specularly reflecting" surfaces- clearly not diffusing, and even more particularly not angularly dependently defusing.

Applicants application original application 09/154019 only disclosed mirror like reflectors, and claimed and discussed the reflectors having angular dependent reflection. Diffuse reflecting reflectors are a specific type which were not disclosed, and therefore would not be considered as meeting the written description requirement, but further, the claims now being angular dependent diffusers- and clearly none of the previous embodiments disclosed a diffusion angular dependence.

Applicant has amended the specification to make the current application a continuation in part of application # 08/542753. However, the written description requirement is clearly not met by that application in respect to claims 17-20, as the operation of the device of that application is completely different, and as the device lacks elements of the claims including the absorbing of light passed by the reflecting means. Here the effective filing date of the application does not go back to the continuation in part, as the written description is not met as there is not reflective

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means as claimed. In an attempt to argue in the reply of 6//30/05 that the written description requirement is met, applicant employs the same element, the liquid crystal layer, for both the liquid crystal layer and the reflecting means. This is clearly an unreasonable interpretation of language, first because the claim clearly recites two separate elements, and second because the liquid crystal layer is clearly not an equivalent means to the means of the instant specification, as the means of the specification are particular structured elements. If in fact applicant's reading of the claim were correct, which it is not, numerous other prior art references would become available as prior art, such as, for example, Fergason 4591233, which shows a liquid crystal layer and a single layer which has some degree of angle selectivity (See cover figure). Even further, any PDLC such as that of Fergason has some degree of angle selectivity, as off angle sees a longer path length though the liquid crystal layer and therefore an increased probability of scattering, so the clear would read on thousands of references such as the Fergason reference. Those references are not applied because the reading of the claim applied by applicant is not considered reasonable. Even futher, for the absorbing means, applicant again points to the same liquid crystal layer as for the other means above, which again is unreasonable and manifestly not equivalent means to an absorbing layer. So applicant uses the same layer for three claimed elements- a wholly unreasonable interpretation.

Affidavit/Declaration under 1.131

The declaration filed on 6/14/02 under 37 CFR 1.131 has been considered but is ineffective to overcome the references.

1) The evidence submitted is insufficient to establish a conception of the invention in this country or a NAFTA or WTO member country prior to the effective date of the reference.

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The evidence submitted is insufficient to establish a conception of the invention prior to the effective date of the Neijzen, U.S. Patent # 5,929,956 reference, the affidavit or declaration and exhibits fail to clearly explain which facts or data applicant is relying on to show completion of the invention prior to the particular date. Specifically, the affidavit fails to set forth the facts by which applicant seeks to show conception, in that applicant has not indicated what it is that the invention disclosure is- if it was done before the date of the reference- or if it was done after the date of the reference describing an early done experiment. If the invention disclosures were submitted and dated before the date of the reference, then the affidavit should set forth this fact. For example, in the beginning of element #3 of the affidavit, add the statement "Invention disclosures were submitted and dated before the filing date of Neijzen et al". If the invention disclosures were made after that date, but are somehow being relied upon to show evidence the conception, then applicant should say how those disclosures should be construed as evidencing conception before the date of the reference. Without knowing what the documents are (whether they were written around the time of the conception or years after), we can't know what exactly the documents mean. Therefore we can't know what it was that was conceived of before the date of the reference. Applicant's statement that the "claimed device" was conceived Here the effective filing date of the application does not go back to the continuation in part, as the written description is not met as there is not reflective means as claimed. In an attempt to argue in the reply of 6//30/05 that the the prior application of which the instant application is a continuation in part meets the claim, and therefore establishes a conception an

In an attempt to argue in the reply of 6//30/05 that the the prior application of which the instant application is a continuation in part meets the claim, and therefore establishes a conception an a constructive reduction to practice, applicant employs the same element, the liquid crystal layer, for both the liquid crystal layer and the reflecting means. This is clearly an unreasonable interpretation of language, first because the claim clearly recites two separate elements, and second because the liquid crystal layer is clearly not an equivalent means to the means of the

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instant specification, as the means of the specification are particular structured elements. If in fact applicant's reading of the claim were correct, which it is not, numerous other prior art references would become available as prior art, such as, for example, Fergason 4591233, which shows a liquid crystal layer and a single layer which has some degree of angle selectivity (See cover figure). Even further, any PDLC such as that of Fergason has some degree of angle selectivity, as off angle sees a longer path length though the liquid crystal layer and therefore an increased probability of scattering, so the clear would read on thousands of references such as the Fergason reference. Those references are not applied because the reading of the claim applied by applicant is not considered reasonable. Even further, for the absorbing means, applicant again points to the same liquid crystal layer as for the other means above, which again is unreasonable and manifestly not equivalent means to an absorbing layer. So applicant uses the same layer for three claimed elements- a wholly unreasonable interpretation.

The evidence submitted is insufficient to establish a reduction to practice of the invention in this country or a NAFTA or WTO member country prior to the effective date of the reference Neijzen, U.S. Patent # 5,929,956. No facts or evidence there of were presented in the affidavit indicating that the device was made and worked for its intended purpose before the date of the reference. In an attempt to argue in the reply of 6//30/05 that the the prior application of which the instant application is a continuation in part meets the claim, and therefore establishes a conception an a constructive reduction to practice, applicant employs the same element, the liquid crystal layer, for both the liquid crystal layer and the reflecting means. This is clearly an unreasonable interpretation of language, first because the claim clearly recites two separate elements, and second because the liquid crystal layer is clearly not an equivalent means to the

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means of the instant specification, as the means of the specification are particular structured elements. If in fact applicant's reading of the claim were correct, which it is not, numerous other prior art references would become available as prior art, such as, for example, Fergason 4591233, which shows a liquid crystal layer and a single layer which has some degree of angle selectivity (See cover figure). Even further, any PDLC such as that of Fergason has some degree of angle selectivity, as off angle sees a longer path length though the liquid crystal layer and therefore an increased probability of scattering, so the clear would read on thousands of references such as the Fergason reference. Those references are not applied because the reading of the claim applied by applicant is not considered reasonable. Even futher, for the absorbing means, applicant again points to the same liquid crystal layer as for the other means above, which again is unreasonable and manifestly not equivalent means to an absorbing layer. So applicant uses the same layer for three claimed elements- a wholly unreasonable interpretation.

- The evidence submitted is insufficient to establish diligence from a date prior to the date of the **Neijzen # 5,929,956** reference to either a constructive reduction to practice or an actual reduction to practice. No facts establishing diligence or evidence thereof was presented in the affidavit.
- 3) The reference **Neijzen, U.S. Patent # 5,929,956** is a U.S. patent or U.S. patent application publication of a pending or patented application that claims the rejected invention.

 An affidavit or declaration is inappropriate under 37 CFR 1.131(a) when the reference is

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claiming the same patentable invention, see MPEP § 2306. If the reference and this application are not commonly owned, the reference can only be overcome by establishing priority of invention through interference proceedings. See MPEP Chapter 2300 for information on initiating interference proceedings. If the reference and this application are commonly owned, the patent may be disqualified as prior art by an affidavit or declaration under 37CFR 1.130. See MPEP § 718.

4) The reference **Neijzen, WO 98/23996** is a statutory bar under 35 U.S.C. 102(b) and thus cannot be overcome by an affidavit or declaration under 37 CFR 1.131 (claim 20 only).

Interference

It is noted that applicant has copied a claim of prior US Patent #5,929,956. As applicant is claiming the same invention as a patent which has an earlier effective United States filing date by greater than 3 months and as applicant has not submitted the items required by 37 CFR 1.608(a) or (b) in that no corroborating affidavit was provided, the application has been rejected under 35 _U.S.C. 102(e)/103. Applicant is advised that the patent cannot be overcome by an affidavit or declaration under 37 CFR 1.131 but only through interference proceedings. See MPEP § 2308 and note that advised that an affidavit under 37 _CFR 1.608(b) or evidence and an explanation under 37 CFR 1.608(b), as appropriate, must be submitted.

Response to Arguments

Applicant's arguments filed have been fully considered but they are not persuasive.

Applicant's arguments regarding the issue involving the term diffuser are not agreed with, as the Neijizen reference itself and the instant application both provide

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evidence of the meaning of the terms. Both Neijizen and the instant application describe applicants angle-dependent reflector as <u>reflectors</u> (element 21 in Neijizen and 56 of the instant application), and Neijizen describes angle-dependent diffusers 17 as diffusers. In fact the instant application described the element as being specular reflecting- to now call that same element "diffusing" is clearly contradicting the original terms used, and describing a different element. Further, element is decribed as being an angle-dependent diffuser- something not in any way described in the specification. The only reason that no 112 first paragraph is not applied is because one of ordinary skill can make the device by referring to the specification of Neijizen.

Applicants argument that the affidavit is sufficient in evidencing conception and are not agreed with. Applicant in fact argues that the disclosures describe something done before that date of invention, implying that the invention disclosure were made before the reference dates, the affidavit doesn't clearly state this, and even the arguments don't directly state this. If the drawing was done afterwards, it would need to be clear what was disclosed and or discussed earlier; as a substantially later paraphrasing could change meaning and may not give a correct picture of what was done earlier. So as we don't know what this document is, we can't evaluate what it implies in regard to what was conceived of prior to the date of the reference. Further, there is absolutely no evidence of reduction to practice- of the invention actually having been made and how it worked so that a determination that a reduction to practice occurred. No activities at all are presented to establish diligence.

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Regarding the affidavit being ineffective because the claims are not patentably distinct from the reference, applicant make an unrelated argument regarding something about common ownership.

Applicants argument that the affidavit of Lowe also serves as an affidavit under 608 is manifestly lacking, as the examiner indicated that a <u>CORROBORATING</u> affidavit was lacking.

Additionally, a reference which is a 102(b) against applicants claims has been found and applied. The reference is an article that was first distributed at the last day of the statutory bar period under 102(b).

Applicants newly added continutation in part status does not bring the effective filing date earlier on any of the claims as the written discription requirement is not met by the reference in that it did not include the absorbing layer or the claimed functionality. The other continuing application does not give an earlier date for claim 19 as that claim includes subject matter not claimed or described in the earlier application (see above). Here the effective filing date of the application does not go back to the continuation in part, as the written description is not met as there is not reflective means as claimed. In an attempt to argue in the reply of 6//30/05 that the written description requirement is met, applicant employs the same element, the liquid crystal layer, for both the liquid crystal layer and the reflecting means. This is clearly an unreasonable interpretation of language, first because the claim clearly recites two separate elements, and second because the liquid crystal layer is clearly not an equivalent means to the means of the instant specification, as the means of the specification are particular structured elements. If in fact applicant's reading of the claim were correct, which it is not, numerous other prior art references would become available as prior art, such as, for

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example, Fergason 4591233, which shows a liquid crystal layer and a single layer which has some degree of angle selectivity (See cover figure). Even further, any PDLC such as that of Fergason has some degree of angle selectivity, as off angle sees a longer path length though the liquid crystal layer and therefore an increased probability of scattering, so the clear would read on thousands of references such as the Fergason reference. Those references are not applied because the reading of the claim applied by applicant is not considered reasonable. Even further, for the absorbing means, applicant again points to the same liquid crystal layer as for the other means above, which again is unreasonable and manifestly not equivalent means to an absorbing layer. So applicant uses the same layer for three claimed elements- a wholly unreasonable interpretation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth A Parker whose telephone number is 571-272-2298. The examiner can normally be reached on M-F 10:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Kenneth A Parker Primary Examiner Art Unit 2871